

# ECE 476/676 - Homework #5

*Graphic Display - Due Monday, February 24th*

## Shoot Game

1) Write a Python program to simulating launching a tennis ball at a target.

At the start of the game, a random location of a target is picked at random at a distance of 240-479 meters.

Each round, you input the speed and angle of a tennis ball, launched at the target.

The Python program then

- Calculates the trajectory of the tennis ball,
- Displays the flight of the tennis ball on the LCD screen, and
- Stops when the tennis ball hits the ground ( $y \leq 0$ ).

If the distance to the target is less than 1 meter, the game is over and your score is the number of shots.

If the distance is more than 1m,

- The distance to the target is displayed, and
- A new round begins (input speed and angle, repeat)

Give the resulting Python Code

2) Demo your shoot game

